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EXAMINER

HINZE, LEO T

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/565,792	Applicant(s) ROLAND ET AL.	
	Examiner LEO T. HINZE	Art Unit 2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 14 July 2008 have been fully considered but they are not persuasive.

a. Applicant argues on p. 7 that Etchell does not teach "the at least one lever element being engageable in the at least one recess in order to produce a tangential tension of the sleeve-like cover when the cover is fitted to the cylinder, the at least one lever element being adapted in such a way that the slit become narrower when the at least one lever element produces the tension," because the hooks 54 disclosed by Etchell cooperate with an inclined surface and therefore can not produce tangential tension. The examiner disagrees. Even though the surfaces are inclined, it appears that and force the hooks 54 impart normal to the inclined surface will have at least some component in the tangential/circumferential direction.

2. Applicant's arguments with respect to the previous rejections of the claims as being anticipated by Fermi or Albright are moot in light of the new rejections applied below.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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4. Claims 22-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 22 recites the limitation “that the slit becomes narrower when the at least one lever element produces the tension.” This limitation is unclear, as the state and condition of the slit and the sleeve-like cover is not described in such a way as to make it clear when the slit is wider, and when it is narrower. The slit does not appear to have a nominal width, other than when it is installed on the cylinder and the lever element is engaged in the at least one recess. It appears that only in this state does the slit have a definable width. At any other time, the width of the slit appears to be variable, because the width of the slit appears to depend upon the diameter and rigidity of a surface or object around which the sleeve-like cylinder is wrapped. To expedite prosecution, the examiner will interpret the limitation “that the slit becomes narrower when the at least one lever element produces the tension” to mean that there is some elongation in the sleeve-like cover due to the tension imparted in the cover by engagement of the lever element.

b. Claim 28 recites the limitation “until the walls of the slit contact each other.” This limitation implies that the walls of the slit are touching, and therefore that there is no longer a slit. If the slit is no longer extant, it is not clear how the at least one retaining element of claim 22 could retain edges of a printing form in the slit. Further, the clause “until the walls of the slit contact each other” does not appear to clearly modify the limitation “lever element can produce a tension in a circumferential direction of the

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cover,” as the clause appears to imply that the lever will cease producing a tension when the walls of the slit contact each other. Instead, according to the specification, it appears that the lever will constantly produce a tension, and not stop producing a tension once the walls of the slit contact each other.

c. Because the limitations in claim 28 contradict those in claim 22, e.g. the walls of the slit could not both touch yet still form a slit and contain at least one retaining element that affixes a printing form, the examiner will expedite prosecution by interpreting the scope of claim 28 as not being defined by the clause “until the walls of the slit contact each other”.

Appropriate correction and/or clarification is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 20-28, 30-33, and 38-42 are rejected under 35 U.S.C. 102(b) as being anticipated by Etchell et al., US 4,313,378 A (hereafter Etchell).

a. Regarding claim 20, Etchell teaches a printing cylinder apparatus comprising: a cylinder (10, Fig. 1) including at least one lever element (54, Fig. 1); a sleeve-like cover for the cylinder (51, 52, Fig. 1) including material having a slit running parallel to an axis of rotation of the cover (20, Fig. 1) and at least one recess in an inner circumferential

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surface of the cover (55, Fig. 1), the at least one lever element being engageable in the at least one recess in order to produce a tangential tension of the sleeve-like cover when the cover is fitted to the cylinder (lever 54 engages recess 55 and appears to impart a tangential force in sleeves 51, 52, Fig. 1), the at least one lever element being adapted in such a way that the slit becomes narrower when the at least one lever element produces the tension; at least one retaining element (the tension produced by lever 54 will cause a strain in cover 52 and 51, resulting in elongation of cover 52, 51), edges of a printing form being fixable in the slit via the at least one retaining force element (edges 41, 42, fixable on retaining element 30, 30' in gap, Fig. 3); the cover being adapted to hold a plate-like printing form (12, Fig. 3).

The examiner is interpreting the claim term "slit" to mean "slit-like." The definition of slit, according to the online version of Merriam-Webster, is "a long narrow cut or opening." As claimed, slit 12 does not appear to be a cut or opening in the sleeve-like cover 10, because the sleeve-like cover 10 appears to be a single element in Fig. 1. However, when sleeve-like cover 10 is installed on a printing cylinder, the gap 12 between the two ends appears to be similar to a slit. Therefore, the examiner will interpret "slit" to mean "slit-like."

b. Regarding claim 20, Etchell teaches a sleeve-like cover as recited in claim 22 as discussed in claim 22 above. Etchell also teaches a method for varying a printing length of a press comprising exchanging a sleeve-like cover as recited with a further sleeve-like cover of a different external diameter ("radial dimension of the blanket should... be equal to the outer diameter of the blanket," col. 5, ll. 37-42).

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c. Regarding claim 21, Etchell teaches a sleeve-like cover as recited in claim 22 as discussed in claim 22 above. Etchell also teaches a method of fitting a plate-like printing form to a sleeve-like comprising the steps of: introducing a leading edge of the edges of printing form into the slit in the sleeve-like cover of the printing form (leading edge 41 fitted in slot, Fig. 3); winding the printing form onto an outer circumferential surface of the sleeve-like cover and introducing a trailing edge of the edges of printing form into the slit in the sleeve-like cover of the printing form (form 12 wrapped around cylinder 10 and trailing edge 42 inserted into slit, Fig. 3), the leading edge and the trailing edge of the printing form being clamped between the retaining force element and a wall of the slit (edges 41, 42, between the end of element 30 and wall of slit 20, Fig. 3).

d. Regarding claim 23, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the cylinder includes at least one protrusion (levers 54, Fig. 1) protruding from the cylinder and the at least one recess includes a first recess and a second recess (multiple recesses 55, Fig. 1), the at least one lever element being engageable in the first recess and the at least one protrusion engageable in the second recess (each recess 55 has a protruding element/lever 54, Fig. 1).

e. Regarding claim 24, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the lever is rotatable by a rotating and tensioning device (lever 54 appears to rotate, and appears to be rotated by a “rotating and tensioning” device, Fig. 1).

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f. Regarding claim 25, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the cylinder is one of a printing form cylinder ("a printing cylinder 10 providing a cylindrical plate-supporting surface 11 carrying a plate 12 made of flexible material," col. 3, ll. 3-5).

g. Regarding claim 26, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the at least one recess is a groove running parallel to the axis of rotation of the cover, the cover being removable from the cylinder and being fittable to the cylinder in a direction parallel to an axis of rotation of the cylinder (grooves 55 run parallel to the axis of rotation, and the cover 51, 52, is removable, Fig. 1).

h. Regarding claim 27, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the slit has walls and the walls can match each other in a form fitting manner (in Fig. 5, the walls of the slit appear to be capable of matching each other in a form-fitting manner).

i. Regarding claim 28, Etchell teaches the printing cylinder apparatus as recited in claim 27 as discussed in the rejection of claim 27 above. Etchell also teaches wherein the at least one lever element can produce a tension in a circumferential direction of the cover until the walls of the slit contact each other (lever 54 appears capable of producing tension in cover 51, 52 and causing elongation of cover 51, 52, such that walls of slit can contact each other if they are in close proximity).

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j. Regarding claim 30, Etchell teaches the printing cylinder apparatus as recited in claim 27 as discussed in the rejection of claim 27 above. Etchell also teaches one of a plate-like printing form t having bent-over edges (41, 42, Fig. 1), the bent-over edges clamped in the slit via the cover being pretensioned by the at least one lever element (54, Fig. 1), the walls of the slit being the at least one retaining force element (30, Fig. 1).

k. Regarding claim 31, Etchell teaches the printing cylinder apparatus as recited in claim 27 as discussed in the rejection of claim 27 above. Etchell also teaches one of a sleeve-like printing form on the cover (printing form 11 appears to be “sleeve-like”, Fig. 1).

l. Regarding claim 32, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the at least one retaining force element is fixed to the sleeve-like cover (30 appears fixed to 51, Fig. 1).

m. Regarding claim 33, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the slit widens trapezoidally from an outer circumferential surface into an interior of the sleeve-like cover or the slit is symmetrical to a plane in which an axis of symmetry of the sleeve-like cover runs (see trapezoidal slit 20, Figs. 1, 3).

n. Regarding claim 38, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein

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the cover has a layer structure with a number of layers (the sleeve-like structure 51, 52, is a layer structure where the number of layers is one).

o. Regarding claim 40, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the material permits elastic deformation of the sleeve-like cover at least in the radial direction so that an internal diameter or an external diameter of the sleeve-like cover is variable (sleeve 51, 52, is made from Delrin, (col. 5, l. 34), which elastically deforms under stress, thereby allowing the cover to elastically deform in the circumferential direction, further causing a change in one or both of the OD or ID of the cover).

p. Regarding claim 41, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the step of clamping the trailing edge includes clamping the trailing edge between the retaining force element and another wall of the slit (edges 41, 42, between the end of element 30 and wall of slit 20, Fig. 3).

q. Regarding claim 42, Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches wherein the method is carried out outside of a press (it appears that because of the difficulty in performing the method in the tight confines of the press, the method is carried out outside of the press, Fig. 1).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Etchell in view of Bass et al., US 3,146,709 A (hereinafter Bass).

Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches a central duct (not shown, but inherently present to supply vacuum, col. 2, ll. 24-26), air outlet ducts that can supply compressed air from the air ducts on the surface of the sleeve-like cover when the cover (vacuum seal requires ducts to allow movement of air, col. 2, ll. 24-26).

Etchell does not teach wherein the cylinder has a central duct running substantially parallel to an axis of rotation of the cylinder, a number of air outlet ducts originating from the central duct, wherein the sleeve-like cover has air ducts that align with the air outlet.

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Bass teaches a cylinder with a central duct running substantially parallel to an axis of rotation of the cylinder (12, Fig. 1), a number of air outlet ducts originating from the central duct, wherein the cover has air ducts that align with the air outlet ducts (30, Fig. 6).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Etchell to include a central duct running substantially parallel to an axis of rotation of the cylinder, a number of air outlet ducts originating from the central duct, wherein the sleeve-like cover has air ducts that align with the air outlet ducts in such a way that compressed air supplied through the central duct can emerge from the air ducts on the surface of the sleeve-like cover when the cover is tensioned in the circumferential direction of the cover by the at least one lever element and the walls of the slit contact each other as taught by Bass, because Etchell is silent as to the details of how the vacuum system facilitates airflow, and one would look to the prior art to find a system that would predictably allow a vacuum system to hold the plate to the cylinder.

10. Claim 34 is rejected under 35 U.S.C. 103(a) as being unpatentable over Etchell in view of Albright, US 3,791,295 A (hereinafter Albright).

Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above.

Etchell does not teach wherein the edges of the slit formed with the outer circumferential surface are rounded.

Albright teaches a printing saddle (54, Fig. 3) for a cylinder in a press (14, Fig. 1) for holding a plate-like printing form (12, Fig. 1) comprising material having a slit running parallel to an axis of rotation of the cover (see slit, Fig. 3), edges of a printing form fixable in the slit via at least one retaining force element (66, Fig. 3), wherein the edges of the slit formed with the outer circumferential surface are rounded (see rounded edges of 54, Fig. 3).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Etchell wherein the edges of the slit formed with the outer circumferential surface are rounded as taught by Albright, because one having ordinary skill in the art would recognize that the rounded edges may help reduce stress discontinuities in the printing plate that could be caused by corners that are too sharp.

11. Claims 35–37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Etchell in view of Fermi, US 4,191,106 A (hereinafter Fermi).

a. Regarding claim 35:

Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above.

Etchell does not teach wherein the retaining force element includes a first and a second leaf spring for pressing on the edges of a printing form in the slit against a wall of the slit.

Fermi teaches a sleeve-like cover (21 Figs. 1, 3) for a cylinder in a press (1, Fig. 1), for holding a plate-like printing form (6, Fig. 1) comprising: material having a slit (see gap between ends of 2, Fig. 3) running parallel to an axis of rotation of the cover, edges

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of a printing form fixable in the slit via at least one retaining force element (25, Fig. 3); and a first and a second leaf spring for pressing on the edges of the printing form in the slit against a wall of the slit (25, Fig. 3).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Etchell wherein the retaining force element includes a first and a second leaf spring for pressing on the edges of a printing form in the slit against a wall of the slit as taught by Fermi, because one having ordinary skill in the art would realize that leaf springs would predictably provide a more secure securing mechanism for the edges of the plate.

b. Regarding claim 36, the combination of Etchell and Fermi teaches the printing cylinder apparatus as recited in claim 35 as discussed in the rejection of claim 35 above. The combination of Etchell and Fermi also teaches wherein the edges include leading and trailing edges and the wall includes a first wall and a second wall, the first spring being adapted to press the leading edge against the first wall and the second spring being adapted to press the trailing edge against the second wall (Fermi: two separate springs 25 and 30 press separate edges of plate 6 against separate walls, Fig. 3).

c. Regarding claim 37, the combination of Etchell and Fermi teaches the printing cylinder apparatus as recited in claim 35 as discussed in the rejection of claim 35 above. The combination of Etchell and Fermi also teaches one of a plate-like printing form, a leading edge of the printing form or printing blanket being clamped between the first leaf spring and a first wall of the slit and a trailing edge of the printing form or the

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printing blanket being clamped between the second leaf spring and a second wall of the slit (Fermi: two separate springs 25 and 30 press separate edges of plate 6 against separate walls, Fig. 3).

12. Claim 39 is rejected under 35 U.S.C. 103(a) as being unpatentable over Etchell in view of Barnes, US 3,108,538 A (hereinafter Barnes).

a. Regarding claim 39,

Etchell teaches the printing cylinder apparatus as recited in claim 22 as discussed in the rejection of claim 22 above. Etchell also teaches the edges of a printing form are fixable in the slit. Etchell teaches that it is sometimes desirable to use a “one around” printing plate in which both the leading and trailing edges of the printing plate are tucked into the same slit (col. 7, ll. 19-21).

Etchell does not teach wherein the slit is a single slit.

Barnes teaches a single printing saddle in the circumferential direction (16, Fig. 1) for clamping a single plate (P, Figs. 7-10).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify Etchell wherein the slit is a single slit by using only a single saddle as taught by Barnes, because one having ordinary skill in the art would recognize this would eliminate the unnecessary second slit in the event that only a “one around” plate was used.

Conclusion

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leo T. Hinze whose telephone number is 571.272.2864. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on 571.272.2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic

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Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anthony H Nguyen/
Primary Examiner, Art Unit 2854

Leo T. Hinze
Patent Examiner
AU 2854
28 October 2008